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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,825	09/30/2004	Karl Hellwig	P15087-US1	4358
27045	7590	05/18/2007	EXAMINER	
ERICSSON INC.			PEREZ, ANGELICA	
6300 LEGACY DRIVE			ART UNIT	
M/S EVR 1-C-11			PAPER NUMBER	
PLANO, TX 75024			2618	
			MAIL DATE	DELIVERY MODE
			05/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/509,825

Applicant(s)

HELLWIG ET AL.

Examiner

Perez M. Angelica

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/30/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 22 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The examiner is not sure about what "common base station unit" means. Are the first and second base stations the same base station? Are the first and second base stations part of the same system? The examiner could not find in the specifications subject matter that could clarify the limitation.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

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directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 16, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Komaili et al. (Komaili, US Patent No.: 7,164,710 B2).

Regarding claims 16, 23, 25 and 26, Komaili teaches of a method and system of controlling transmit power in a radio communication system (paragraph 19, lines 19-22, where modification of power correspond to power control) having a first base station in communication with a first mobile station (column 1, lines 33-35) and a second base station in communication with a second mobile station (column 1, lines 35-37, where the Examiner did not find any wording that relates the two communications; therefore, any separate uplink and downlink connections within or outside a cell system apply), the method comprising the steps of: communicating through an uplink connection from the first mobile station to the first base station utilizing an uplink power (column 1, lines 33-35, where the uplink power is lower); communicating through a downlink connection from the second base station to the second mobile station utilizing a downlink power (column 1, lines 35-37, where the downlink power is higher); requesting by the first base station, a first Adaptive Multi-Rate (AMR) coded mode for use on the uplink connection (columns 1 and 3, lines 10-15 and 13-15, respectively, where the determination is done at the BS, thus it makes the request), the first AMR coded mode being associated with an uplink Carrier-to-Interference (C/I) ratio (columns 3 and 7 lines 3-6 and 46-54, respectively. See also, figure 3, where the C/I is the basis for the code selection);

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requesting by the second mobile station, a second AMR coded mode for use on the downlink connection (columns 1 and 3, lines 10-15 and 11-13, respectively, where the determination is done at the MS, thus it makes the request), the second AMR coded mode being associated with a downlink C/I ratio (columns 3 and 7 lines 3-6 and 46-54, respectively. See also, figure 3, where the C/I is the basis for the code selection); and adjusting either the uplink power or the downlink power to a power level lower than an optimal power level for the connection with the highest associated C/I ratio (column 19, lines 19-28, where the power level is adjusted to minimize a BER, thus the power level should be decreased for a lower than a maximum C/I in order to obtain a slightly lower BER that will provide better voice quality. See also, columns 13 and 14, lines 55-67 and 1-23. See also figure 5, where when a channel is experiencing a high "C/N" in state 502, however, if the BER and FE are greater than 0 and 1, respectively, the C/I is lowered from 19 to a level between 10 and 19. These changes maintain a "reasonably good voice quality").

Regarding claim 17, Komaili teaches all the limitations of claim 16. Komaili further teaches of adjusting either the uplink power or the downlink power to a power level corresponding to an optimal power level for the connection with the lowest associated C/I ratio (column 14, lines 24-38, where the C/I is at its lowest possible 4-10, while communication is still good enough to be maintained).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komaili in view of Komatsu, Masahiro (Komatsu, US Patent No.: 7,010,320 B2).

Regarding claims 18 and 20, Komaili teaches all the limitations of claim 16.

Komaili does not specifically teach where the step of adjusting either the uplink power or the downlink power includes controlling the uplink power from the first mobile station by a command from the first base station to the first mobile station.

In related art concerning a transmission power control method, base station, mobile station and mobile communication system, Komatsu teaches controlling the uplink /downlink power from the first mobile station by a command from the first/second base station to the first/second mobile station (column 8, lines 37-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Komaili' power control method with Komatsu's conventional power control method in order to provide adjustments that will lead to increase of system capacity, as taught by Komatsu.

Regarding claim 24, Komaili and Komatsu teach all the limitations of claim 18.

Komaili further teaches of adjusting either the uplink power or the downlink power to a power level corresponding to an optimal power level for the connection with the lowest AMR coded mode request (columns 1 and 14, lines 10-15 and 33-35, where the vocoder is at a low 4 Kbits/s rate).

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8. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komaili in view of Niemelä, Kari (Niemelä, US Patent No.: 6,452,914 B2).

Regarding claims 19 and 21, Komaili teaches all the limitations of claim 16.

Komaili does not specifically teach where the step of adjusting either the uplink/downlink power or the downlink power includes controlling the downlink power from a base station controller associated with the first/second base station.

In related art concerning a mobile TDMA/GSM system which uses a plurality of bits for the steal symbols flag, Niemelä teaches of controlling the uplink/downlink power from a base station controller associated with the first/second base station (column 4, lines 12-29, see also figure 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Komaili's power control method with Komatsu's conventional power control method in order to provide adjustments as done in GSM systems, as taught by Niemelä.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-7885. The examiner can normally be reached on 6:00 a.m. - 1:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

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Angelica Perez
Examiner



MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER

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May 4, 2007